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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,791	12/26/2000	Par Lindh	279.352US1	3323

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EXAMINER	
EVANISKO, GEORGE ROBERT	
ART UNIT	**PAPER NUMBER**
3762	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/748,791	LINDH ET AL.	
	Examiner	Art Unit	
	George R. Evanisko	3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-20 and 47-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-20 and 47-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/28/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/28/05 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al (5372607). Stone states in column 8, lines 16-31, that the data is displayed by the external unit for purposes of selecting AV adaptation profiles and suggests profiles for the pace and sense AV adaptation so the clinician can accept a suggested profile with one keystroke of the programmer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16, 17, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al in view of Sweeney et al (6272377).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the

reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2). .

Stone discloses the claimed invention except for receiving intracardiac electrogram data containing the QRS duration and left and right ventricular depolarizations to determine the relationship between the depolarizations and durations to select a ventricular stimulation site for pacing. Sweeney teaches that it is known to use a programmer (column 7) for receiving intracardiac electrogram data containing the QRS duration and left and right ventricular depolarizations (columns 10 and 11) to determine the relationship between the depolarizations and durations to select a ventricular stimulation site for pacing in order to provide appropriate pacing to the patient based on the patients particular condition (columns 21 and 22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cardiac pacing system as taught by Stone, with receiving intracardiac electrogram data containing the QRS duration and left and right ventricular depolarizations to determine the relationship between the depolarizations and durations to select a ventricular stimulation site for pacing as taught by Sweeney, since such a modification would provide a cardiac pacing/programming system capable of receiving intracardiac electrogram data containing the QRS duration and left and right ventricular depolarizations to determine the relationship between the depolarizations and durations to select a ventricular stimulation site for pacing in order to provide appropriate pacing to the patient based on the patients particular condition.

Claims 47-50, 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al.

Stone discloses the claimed invention except for using a separate paced and intrinsic weighted average of PR intervals for determining the AV interval and receiving separate intrinsic and paced coefficients for the average. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cardiac pacing/programming system as taught by Stone, with using a separate paced and intrinsic weighted average for determining the AV interval and receiving separate intrinsic and paced coefficients for the average since it was known in the art that cardiac pacing/programming systems use: a separate paced and intrinsic weighted average for determining the AV interval to weight the newest intervals greater when determining the AV interval since they represent the heart as it is presently functioning and to provide a paced and intrinsic average to improve hemodynamic performance of the heart and for effectively treating hypertrophic obstructive cardiomyopathy or CHF; and receiving separate intrinsic and paced coefficients for the average to allow the physician to adjust the weighted averages to provide for different cardiac conditions and/or to allow the heart a chance to beat on its own or to always provide pacing to the heart.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-20 and 47-58 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 6622040. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are more narrow and meet the limitations of this application's claims. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to included in the method and system of the patented claims, a programmer receiving PR interval durations and calculating, displaying, and programming a suggested AV interval, and using a separate paced and intrinsic weighted average of PR intervals for determining the AV interval and receiving separate intrinsic and paced coefficients for the average since it was known in the art that cardiac pacing/programming systems and methods use: a programmer receiving PR interval durations and calculating, displaying, and programming a suggested AV interval to optimize the performance of a pacer based on observed heart values; a separate paced and intrinsic weighted average for determining the AV interval to weight the newest intervals greater when determining the AV interval since they represent the heart as it is presently functioning and to provide a paced and intrinsic average to improve hemodynamic performance of the heart and for effectively treating hypertrophic obstructive cardiomyopathy or CHF; and receiving separate intrinsic and paced coefficients for the average to allow the physician to adjust the weighted averages to provide for different cardiac conditions and/or to allow the heart a chance to beat on its own or to always provide pacing to the heart.

Claims 15-20 and 42-58 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 65-86 of copending Application No. 10/655569. Although the conflicting claims are not identical, they are not patentably distinct from each other because the co-pending applications claims are more narrow and meet the limitations of this application's claims. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to included in the method and system of the copending applications claims, a programmer receiving PR interval durations and calculating, displaying, and programming a suggested AV interval, and using a separate paced and intrinsic weighted average of PR intervals for determining the AV interval and receiving separate intrinsic and paced coefficients for the average since it was known in the art that cardiac pacing/programming systems and methods use: a programmer receiving PR interval durations and calculating, displaying, and programming a suggested AV interval to optimize the performance of a pacer based on observed heart values; a separate paced and intrinsic weighted average for determining the AV interval to weight the newest intervals greater when determining the AV interval since they represent the heart as it is presently functioning and to provide a paced and intrinsic average to improve hemodynamic performance of the heart and for effectively treating hypertrophic obstructive cardiomyopathy or CHF; and receiving separate intrinsic and paced coefficients for the average to allow the physician to adjust the weighted averages to provide for different cardiac conditions and/or to allow the heart a chance to beat on its own or to always provide pacing to the heart.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kramer and Kieval are two examples of many showing the use of different paced and intrinsic averages and coefficients for determining the AV interval.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Evanisko whose telephone number is 571 272 4945. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571 272 4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George R Evanisko
Primary Examiner
Art Unit 3762
2/4/6

GRE
February 4, 2006